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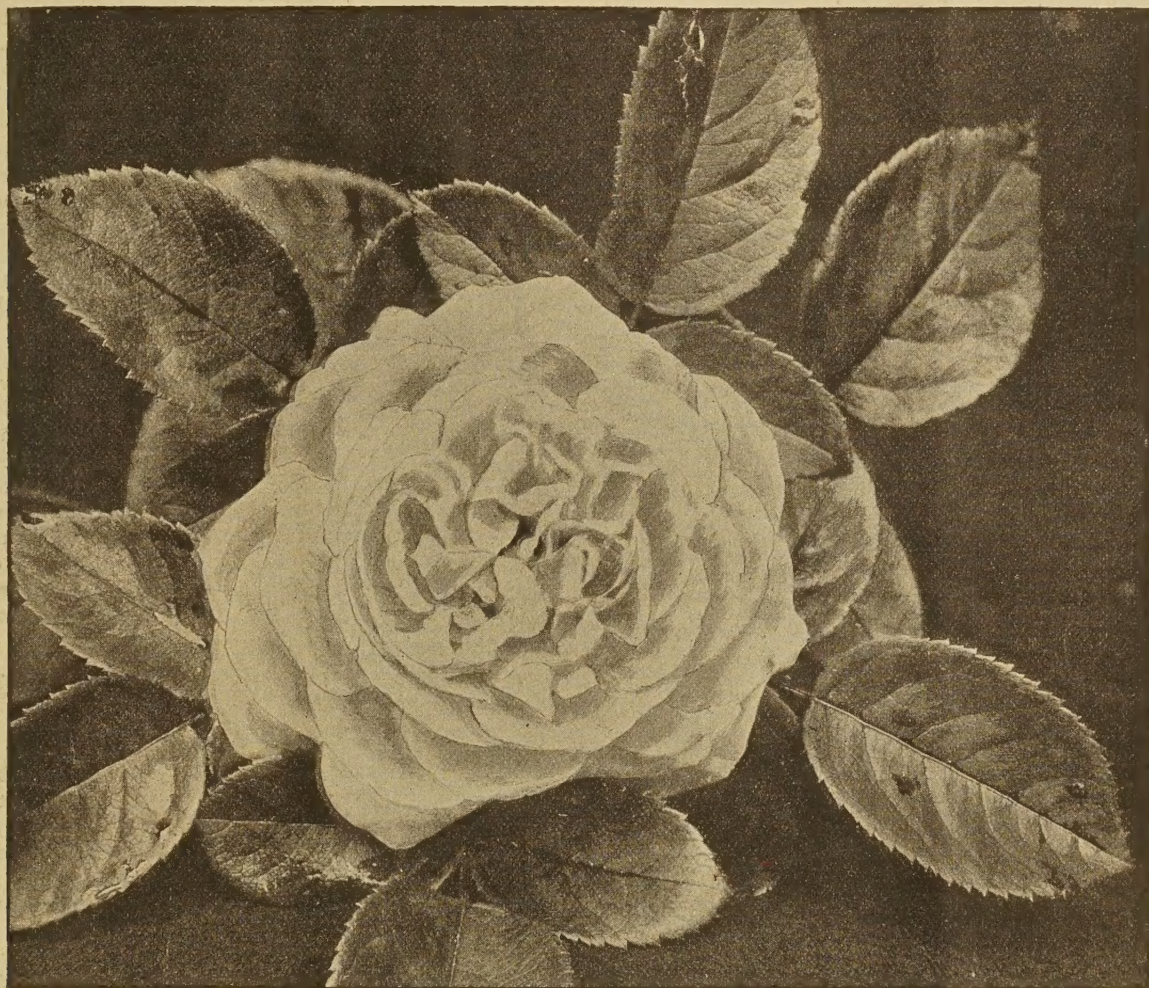
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VICKS MAGAZINE

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No. 6



Photographed by J. Horace McFarland.

ROSE, MARGARET DICKSON.

THE COMBINATION AND GROUPING OF PLANTS.

TREES and plants, like colors, have complements. Often they suggest themselves; otherwise the tasteful and really successful gardeners must find them out. In this way an old garden is mellowed and rounded into fullest beauty, whereas a new one is apt to look crude and harsh.

Two rose gardens that I saw not long ago will point my moral. One was a motley mixture of red, white, pink, yellow and all intermediate shades, clashing in a fierce color quarrel. In the other the rich shades had been carefully grouped. The gardener told me that he had dug up dozens of varieties and replaced them with others that suited his color scheme better. One especially beautiful bed was a crescent of crimson and carmine roses. In one horn of the crescent were the red-black roses, Jean Libaud, Prince de Rohan, Baron de Bonstetten, Earl of Dufferin and others, grading through lighter, gradually brightening crimsons to the other horn, which was tipped with Gloire de Margottin, Meteor and similar types. Behind the bed was a clump of evergreens that greatly intensified the color of the flowers.

I stopped before a grand plat of Margaret Dickson. The great, perfect shining white flowers were contrasted only with their own fine leaves.

"That rose has no companion," the gardener said. "I can find nothing fine enough to go with it yet."

Later he tried Rosa rugosa and Madame Georges Bruant for a center to the plat, with Caroline Marniesse as a border, but shakes his head over the result and says he shall dig them up next spring and leave "Peerless Margaret," as he calls her, alone again. If this fine hardy rose only bloomed a little more freely it might well stand alone.

The creeping myrtles, or vincas, and the creeping Memorial rose form lovely mats of green, but we are apt to tire of their sameness. Last spring we had a number of forced bulbs to be disposed of, and some one suggested planting them under the creepers. So we took a stout, round stake and drove it haphazard here and there, dropping a bulb into each hole and covering it with fresh leaf mold. Now some of the bulbs are up blooming, brightening the dark mass of myrtle wonder-

fully. One clump of poet's narcissus is especially pretty; so were the crocus planted along the edge. The scillas were like darker, stouter editions of the myrtles own delicate lilac blossoms. Near the center of the plat we planted some strong roots of purple iris and some yellow hemerocallis. A carpet of the Memorial rose we are planning to brighten in the same way this spring, using pink and white Roman hyacinths. It lies in the sun, so we shall spangle it with gladioli, too, for later effects. The rose and myrtle will smother the plants eventually, I suppose, but the experiment seems worth repeating.

In very many old Southern gardens here are long rows of box-wood planted by our grandmothers to edge the walks. But for the sake of association we would love to dig them up, replacing them with something less stiff and somber. Lately we have discovered that they form fine back grounds for crimson roses, oriental poppies and gladioli. These really seem much more vivid in color displayed against a dark box background. One walk we lined with scarlet geraniums, and you should have seen the effect!

In old and tangled gardens some very pretty combinations occur that suggest tasteful grouping. We have some fine old clumps of *Cydonia Japonica* in our yard. Between them were planted white spiræas, but these spread into such nuisances that most of them were uprooted long ago. Some roots crept for protection under the cydonia's thorny hedge and have held their own there, until now the stems reach upwards to drift in plumes of white flowers over the cydonia's blaze of red. These sprays are beautiful by contrast and truly "a feather in the cap" of the cydonia.

One of the spiræas left standing reached down kindly arms to a Chinese honeysuckle tramp that had in some way wandered there. Now the bush is a fragrant mound of pink and white honeysuckle in blooming time, and in winter a warm, cozy home for birds. I do not know how long the spiræa can carry such a burden. It is making a gallant struggle. Its stronger shoots pierce through the honeysuckle and wave their white flowers defiantly above the evergreen crown. In autumn, when the spiræa's leaves flush into wonderful tones of pink the contrast is again beautiful.

On one of our old oaks a Virginia creeper has trimmed itself high up among the branches. After the oak drops its leaves in autumn the creeper is still bright for weeks, so that the oak shines like a beacon from all over the yard and meadows near by. This suggested to us a combination of wistaria and Japan cypress that we hope may be successful. This cypress does not unfold its leaf-buds until very late in spring, while the wistaria blooms very early, so that the tree's branches should be garlanded with blue before its own leaves appear.

L. GREENLEE.



VIOLA ODORATA.—NATURAL SIZE.

European Species. The original of the cultivated violets. Escaped from gardens and now growing wild in some places in this country.

A NEW VARIETY OF VIOLET.

A NEW, and apparently a large and fine, form of violet has recently been brought out in France by Millet fils. In connection with the account given of it in the *Revue Horticole*, it appears that the enlargement and improvement of the violet, as now seen in the best varieties, is due in a great measure to French growers, and especially to Millet père. As the account of the writer embodies a brief history of modern violet culture, a translation of the main portion of it may be interesting:

The end of the last century saw the first attempts of the commercial culture of this flower in a village of the Department of the Seine, at Fresnes-Rungis. The inhabitants there were accustomed to gather the wild violets in the neighboring woods and make them

into little bouquets and sell them in Paris. But as the flowers became more and more scarce they tried the cultivation of them in their gardens and were promptly rewarded with flowers in abundance, and prettier than those which grew wild. This problem solved, they tried to obtain remontan or continuous blooming varieties. Then it was that seed plats were sowed, and in one of these was found the *Violet des Quatre Saisons*. This new race was immediately cultivated upon a grand scale at Fontenay, Bourg-la-Reine, Sceaux, Verrieres, etc. This condition continued until 1850, the epoch when the *Parma violet* came to share the public favor with the *Violet des Quatre Saisons*.

Introduced from Asia and Constantinople into Southern Europe, thence into France, the *Parma violet* long remained confined to royal gardens. Nevertheless the cultivators of Provence set themselves earnestly at work to cross-fertilize it with the double flowered varieties which have always been considered as of European origin; these were the double blue, the double rose, and the double white violets.

The grand development of the culture of violets for cut flowers dates from the first empire; the second empire saw its apogee. From 1860 to 1870 nearly twenty thousand sashes were devoted to the forcing of violets, and their culture in the open ground occupied not less than 250 acres. At this epoch Millet pere was a great cultivator of this plant. He sowed seeds without cessation, always seeking to obtain improved varieties, those that were earlier to bloom and hardier.

Then it was that he obtained a violet with a very large flower, compared with any previously seen, and which rapidly made its way under the name of *Millet*. This variety is still cultivated today under the name of *Souvenir de Millet pere*. It is the beginning of the large flowered violets of the present time. At first the *Czar*, then *Gloire de Bourg-la-Reine*. From this time the production of new varieties with enormous flowers was no longer considered remarkable.

Madame Millet, a *Parma violet* with rose colored flowers, obtained from seed, a rare thing, for this race rarely seeds; *La Luxonne*, followed by *Dybowski*, *Welsiana*, *Amiral Avellan*, and finally *Princesse de Galles* (Princess of Wales). The last named has flowers which are not larger than those of *Luxonne*, but the petals are well filled out, as in *Gloire de Bourg-la-Reine*, and the flower is supported by a long stem. This variety is cultivated on a large scale in the South of France.

The variety *La France* is one of the most recent, and one of the most meritorious. Its large and well rounded flowers, of good substance, attain and often exceed the dimensions of a five franc piece (silver dollar). The color is a bluish violet with metallic reflections. All the flowers, quite upright, are supported by stems of a violet green color, very firm, long and holding the blooms well above the foliage.

The remarkable rigidity of the peduncles facilitate with the greatest ease the use of the flowers in bouquet and floral ornaments. The leaves are large, well rounded, highly dentate, and of a handsome green with darker veins.

The flowers are said to be produced in great abundance and very fragrant. The plant is excellent for cultivation under glass for winter flowers, but it can be raised in any garden, large or small, and in the open ground as well as for forcing.

* * *

ANNUALS FOR THE FLOWER GARDEN.

THE cultivation of all kinds of garden annuals is such an easy and simple thing, and flower seeds, plants and bulbs are so inexpensive that there is no reason why hundreds of barren front and back yards should not be made beautiful with flowers. It was one of Pestalozzi's theories that every child in a household should be made to cultivate a bit of soil. Unfortunately, thousands of children in our day cannot have this privilege in their city homes. But there are others who may have flowers if they will.

Among the annuals growing from seeds nothing is better than the nasturtium. It will give great satisfaction in almost any part of the country but seems to be peculiarly adapted to the New England states, and often reaches its highest degree of perfection in the almost barren soil of the seashore. Seeds can be sown in the ground by the 15th of May. The soil should be only moderately rich. The dwarf varieties are best for beds. The plants bloom in great profusion and come in a variety of tints and colors. *Tropæolum majus* is the climbing variety of nasturtium.

The sweet pea is probably the most popular annual in cultivation today, and no flower excels it in graceful beauty or delicate fragrance. The seed should be sown as early as possible. It is perfectly safe to sow them at any time after the first of April. They should be sown fully five inches deep in rich soil and cultivated with care.

It is well to give the plants a mulching of grass to assist in retaining the moisture around the roots. Never let the soil get hard and dry but keep it well stirred with the hoe, or the plants will begun to turn yellow at the base, and when this happens they cannot be saved. There are now

double as well as dwarf sweet peas. No plant blooms in greater profusion and it is so generous that it gives a flower and sometimes two for every bloom you cut from the vines during the blooming season. Indeed the flowers must be cut or the vines will soon cease to bloom. The formation of seed pods is sure to lessen the bloom.

pinks should find a place in every garden. They grow so readily and produce such a variety of velvety flowers with beautifully fringed petals. Many of them are as pretty as a carnation, although smaller.

Poppies will make a finer display and will grow about as readily as weeds. The new Shirley poppies are very satisfactory. They bloom very freely and there seems



From a colored plate in Revue Horticole.

VIOLET, LA FRANCE.

Phlox Drummondii is another admirable flower. The fringed varieties are exceptionally fine. Nothing better for a mass of brilliant color and constant display of bloom. It comes in a wide range of colors and in stripes and blotches. The seeds are very hardy. Sow in the garden about the middle of May in a sunshiny place. The star-shaped varieties are quite a novelty and wonderfully beautiful.

The old-fashioned Dianthus or Chinese

to be no limit to the variety of their colors. The Mikado is a very striking double poppy as large as a chrysanthemum. It is a fine, clear white, with the edge of the petal of a bright crimson. The Oriental and Iceland poppies are also very fine. Avoid covering the seed too deeply. Scatter the soil very lightly over them and press it down smoothly.

In yellow flowers we have the marigold, calendula, calliopsis, California yellow

bells, helianthus and the pure white asters.

The Japanese morning glory is a distinct novelty. The flowers are very large and remarkably varied in coloring. Nothing is better than morning glory vines for concealing an unsightly back fence, and they make a fine background for a bed of other flowers.

The verbena is an old-time favorite and can be grown by any amateur. Give it a sunny situation in good soil.

Sweet alyssum will grow with almost no care and will produce hundreds of beautiful, fragrant white flowers in dainty clusters. It is one of the finest border plants.

Portulaca is fine for a sunny situation in sandy soil. It will produce a solid mass of flowers in bright weather, but

longer, but it now includes the best varieties in general, and the garden in which all or even a part of them are successfully cultivated will be a source of great pleasure to its owner and will add a great deal to the beauty and brightness of the neighborhood.

The cultivation of flowers is of distinct value to children. It is educational and in many ways helpful to the development of the youthful minds. There are many of us who so find such quiet delight in our flower gardens that we know the mind of Emerson when he wrote:

"If I could put my words in song,
And tell what's there enjoyed,
All men would to my garden throng,
And leave the cities void."

J. L. H.

of eighteen inches to six feet, depending upon the richness of the soil, and in a few instances, has been observed in form of a diminutive tree with branches high enough from the ground for a man on horseback to ride beneath them.

The upper illustration on the opposite page gives a very good idea of the manner of growth. The tallest plant shown is just six feet high and so slow is the growth that it is a low estimate to say that this specimen is more than two hundred years old. The illustration of a tree form shows what the plant may become under favorable circumstances.

The plants here pictured were photographed by the writer in a gully near Douglas, Wyoming, and were in such a position as to be protected from sheep and other stock. The camera was placed on the ground near the plants so that the details are well shown, though as there is nothing to show their relative size they appear somewhat exaggerated.

At first acquaintance sage brush relieves, to some extent, the barren monotony of the arid plains, but in time it, too, becomes wearisome to the eyes of the tourist. But let no one despise this child of the desert for it has its uses. To the traveler by team it is often many days the only fuel obtainable and after a long day's drive its stems and branches make a most cheerful camp fire as the chilly night of high altitudes comes on.

Sheep seem to relish it and where they are ranged it is always cropped short. It is claimed by some stockmen that sheep will not keep in good health unless they have access to it. Sage

chickens, a species of grouse, and jack rabbits feed on the shrub, and its flowers make most excellent bee pasturage.

Sage brush receives its name "sage" because of its odor which is similar to that of garden sage. The flavor of it is also somewhat like that of sage, but much stronger and very bitter.

Sage brush belongs to the widely distributed genus *Artemisia* and of the tribe Anthemideæ. The flowers are disposed in dense panicles. The specific name, *tridentata*, refers to the leaves which are obtusely, sometimes obscurely, three toothed and of cuneate form. They vary in some specimens to four or seven toothed. The involucre contains five to eight flowers with yellow corollas.

The usefulness of sage brush has already been stated, but by the settler, who wishes to farm the rich soil in which



From a photograph.

IN THE SAGE BRUSH.
LARAMIE PLAINS, WYO.

SAGE BRUSH.

they begin to close as the sun declines and do not awaken until the next morning.

Salpiglossis and collinsia are two good annuals for the amateur. The godetia is a profuse and steady bloomer, requiring no previous experience on the part of those who wish to cultivate it. The Duchess of Albany is a fine variety; its flowers are very large and pure white, with a satiny gloss. Lady Albermarle is a fine carmine white, Prince Henry is of a clear, bright rose tint, Godetia Bijou is a pure white with a rose-colored spot at the base of the petals.

The gilia, gaillardia, mimulus, nicotiana, nigella, mirabilis, and petunia are very satisfactory annuals of easy culture. The large fringed double petunias are beautiful but they are not very free bloomers.

This list of annuals might be made

WHEN, in traveling toward the Pacific, one reaches the western portion of Nebraska, Dakota or Kansas, as the case may be, he will notice that a small shrub or bush hitherto unknown to him begins to make its appearance, clothing the plain with its tufts or bunches of light gray, green tinted foliage. Further west, near the mountains, this same bush will be seen covering the plain with a dense growth two or three feet high. This is the sage brush botanically known as *Artemisia tridentata*.

There are several other varieties of *Artemisia*, twenty-three are listed by botanists, growing in the western portion of the United States, some of them quite handsome shrubs, but *A. tridentata* is the only one known as sage brush.

If unmolested this shrub attains a height

it grows, it is regarded as an unmitigated nuisance, as it is difficult to grub out and irrigation does not soon kill it.

Its presence indicates a fairly good to rich soil free from alkali. Where alkali is present it gives place to a plant known as greasewood, about which I may have something to write hereafter. S. L.

Douglas, Wyo.

ROSE NOTES.

IN selecting a site for a rose bed, it is of the first importance to see that it is well drained. Roses will not do well on soil that is wet and soggy, or one that holds water. The ideal rose soil is a rich loam with a porous clay sub-soil, but as every lover of the rose has not got this sort of land it is well to remark that one can, by artificial means, overcome the natural defects of the soil and location. If the soil is compact, with a tight sub-soil, then the top soil should be removed and the sub-soil loosened up to the depth of two feet and a quantity of gravel or sand mixed with it. If the location of the bed is not high and well drained tile drainage should be provided. The top soil should be replaced, adding thereto a liberal quantity of rotted sods, rich compost and bone meal, thoroughly incorporating these with the soil. The plants should be set three feet apart each way. In choosing varieties it is best for the beginner to select old, well tested kinds in preference to new ones. After this one can test the new sorts as desired. In making out a list of varieties one should not fail to include the La France roses as none are more beautiful. Of the roses of recent introduction the three Ramblers are superb—crimson, yellow and white—fully equal to the most glowing description. I find them to be entirely hardy, vigorous and healthy growers, making canes ten and twelve feet long in a single season. No one should fail to have all three of them, for they will give entire satisfaction. Another grand new rose is the Empress of China, a very beautiful ever blooming rose, and which is entirely hardy. Its hardiness, together with its beauty, will make it extremely popular. No collection, however small, can afford to be without the Soupert roses; all things considered they are the best hardy ever blooming roses we have. They are constantly in bloom and will produce more roses than any other varieties. The Clothilde Soupert is a beautiful shell pink, shading to white at the edges of the petals. The pink Soupert and the yellow Soupert are, as indicated by their names, a rich pink and yellow.

One of the worst diseases which afflicts our roses is the black spot, a fungous disease which appears on the foliage in small black spots, which increase rapidly in size and number, and soon causing the leaf to drop. It is infectious and rapidly spreads to other leaves and plants, and soon defoliates the plants and ruins the flowers. It is a good practice to gather all the diseased leaves and burn them, thereby destroying the spores and checking the further spread of the fungous. But the only sure way of preventing the disease is to commence early in the spring, as soon as the leaves appear, to spray the plants thoroughly once each week throughout the season with the Bordeaux mixture. I find this to be almost a complete remedy for this disease as well as for the mildew, and much better than sulphur for the latter. My roses are never troubled to any great extent with insects. The flowers should all be cut when they begin to fade; if left on the plant they not only look unsightly but check the production of flowers. Weeds or grass should never be allowed in the rose bed. The rose will not thrive among grass and weeds. In dry weather the plants must have plenty of water if flowers are to be expected. I find a mulch of straw or other litter of the greatest value in producing fancy roses. This mulch should be placed over the entire surface of the bed to the depth of six



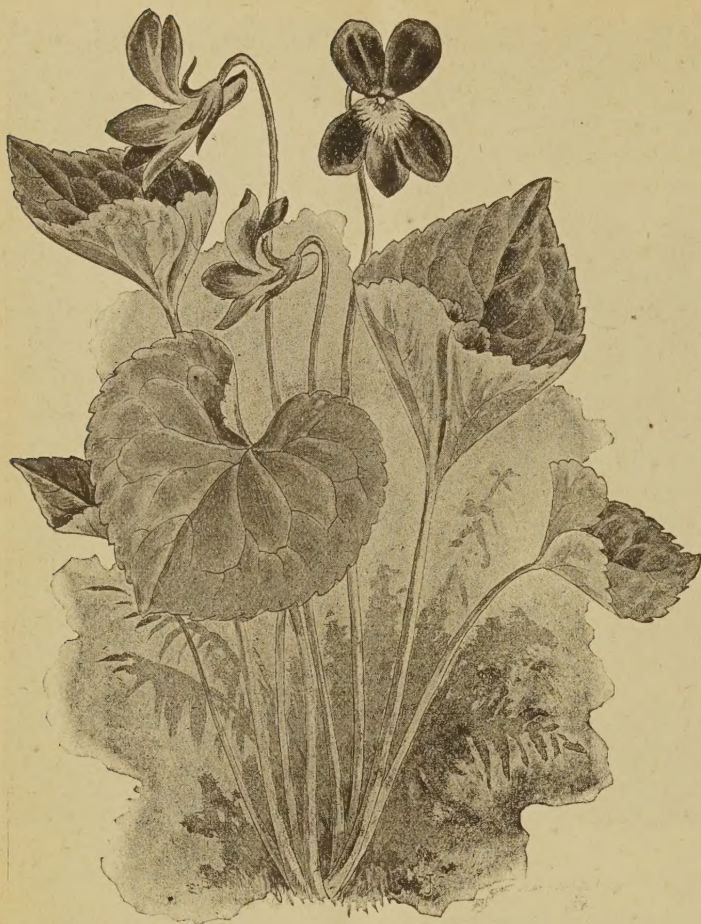
From a photograph.

SAGE BRUSH.
DOUGLAS, WYO.



A MAMMOTH SAGE BRUSH IN BIG HORN BASIN, WYOMING.

Height about 12 feet. Man by the tree holds a 12 foot pole.

 $\frac{2}{3}$ natural size.VIOLA CUCULLATA.
COMMON BLUE VIOLET.

inches or one foot, or at least deep enough to prevent weed growth. It keeps the soil cool and moist during the hottest and driest weather, and roses so treated thrive luxuriantly. One always regrets losing the tender teas and other roses during winter. They always bloom so much better if wintered over. I have never found any of the methods generally recommended very satisfactory. After some experimenting I have discovered a method which is entirely successful. In brief, my method is as follows: Take common cheap lumber, twelve inches wide, and saw into lengths of twelve inches, nail these together as for a box, but without top or bottom. In the late autumn, before the severe cold weather, cut back the tea roses to within six inches of the ground. Set a box over the plant, fill with dry straw or sawdust, and cover with a board so as to keep the tops dry. They will then come through in perfect condition.

MARTIN BENSON.

* *

WILD VIOLETS IN THE GREAT LAKE REGION.

MANY residents of our cities have but a slight conception of the great variety of flowers to be found blooming in the forest and field. This is to be expected, as city people do not visit the woods except at rare intervals. Nevertheless there are many accurate observers in our cities who now and then make flying trips to the country and in a day or two find more species of plants, and it may be of birds and insects, than a rural resident ever dreamed of. We often find men and women illiterate, and woefully lacking, in the centers of culture and refinement, and where the walls of vast libraries and educational institutions tower on every hand, and we marvel at the lack of desire for knowledge where the greed for gain is so great. On the other hand, among country inhabitants, we see an almost total want of interest in the fauna and flora of a section where all Nature is most charming in her glorious display. For instance, go into almost any section of the country north

of the Ohio, and where there is a varied aspect of marsh, forest and plain and you will find from ten to sixteen species of blooming violets; yet, if you should ask the children of some rural school how many violets were to be taken thereabouts they would answer three—blue, white and yellow, for those three colors describe all of the shades of these dear little blossoms. There are probably above twenty species and varieties found in the great lake regions, and of these I have discovered ten kinds growing in abundance in Michigan south of the forty fourth parallel. Among the stemless species we have:

VIOLA CUCULLATA.—The common hooded violet or johnnie-jump-up, which is quite tall and found growing in clusters on low land in early spring. The leaves are heart or kidney-shaped. Flowers blue; sometimes pale and even variegated with white.

V. SAGITTATA.—Arrow-leaved violet. An early species and quite common in some quarters but unknown to the unobservant. Leaves arrow-shaped, which makes it easy of identification.

V. PALMATA.—Hand-leaf violet. This species is more common to the South, but is found sparingly in the shade in dry sandy places. By some it is considered a variety of the hooded violet. It is interesting to note that some violets grow in muck and among bogs; again in deep, low woods, and on high land upon dry sandy soil.

V. PEDATA.—Bird's foot violet. This is one of our most interesting species. It is very beautiful light in color, almost of a lilac or lavender shade. The leaves are slit up and are entirely different from the general form, hence its name. This pleasing flower is found in dry, sandy soil, and takes delight in the hottest sunshine. Its beauty and grace make it attractive and it is often transplanted to the garden, where it always droops and dies, unless provided with the same light, sandy soil of its nativity. The above four species are blue and violet of various shades and bloom in April, May and June.

V. BLANDA.—Sweet white violet. Very few of our violets are scented, and the common fragrant species cultivated in our gardens is an imported flower, *V. odorata*, as is also the pansy, *V. tricolor*. *V. blanda* has a faint odor, yet readily detected by one cultivated in delicate scents. The dainty flowers are purple-veined, while the leaves are bright green and heart-shaped. It is our smallest violet and is only found in moist, rich woods and at their edges in April and May.

V. LANCEOLATA.—The lance-leaved violet is the rarest of all of our species. I have found it growing in but two sections in

 $\frac{2}{3}$ natural size.

VIOLA PALMATA.

all my rambles; one situation was an island in a small lake in Van Buren county, Michigan, and another was at the edge of a lake upon low land in Montcalm county, Michigan. The flowers are small and white. The leaves are long and narrow, and the plant would not be recognized as a violet were it not for the blossoms.

Kalamazoo, Michigan.

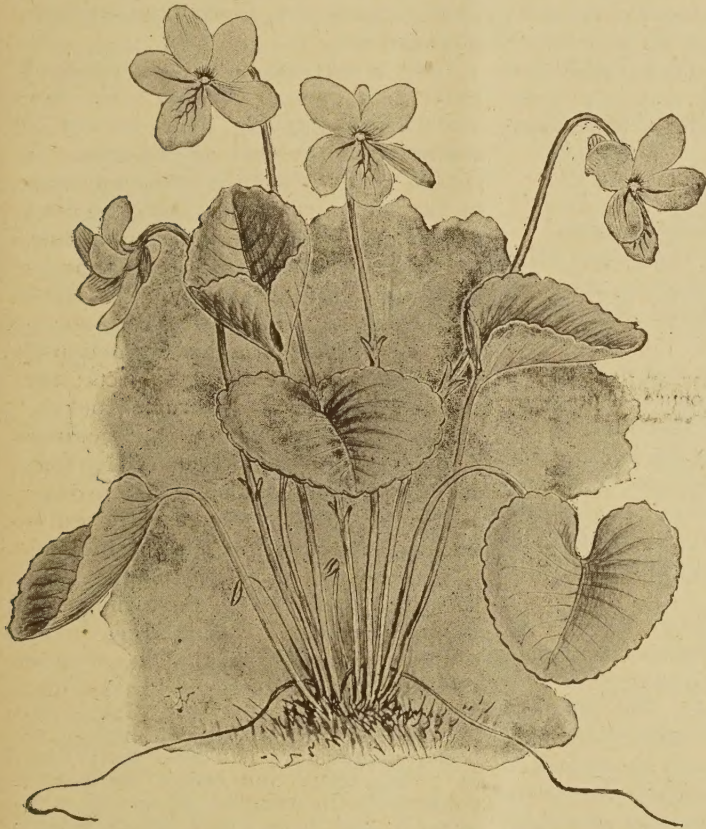
MORRIS GIBBS.

TO BE CONCLUDED NEXT MONTH.

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PLANTS AND DROUTH.

THE season of 1897 was one which tried the vitality of plants more than the severest winter ever known in these parts. Hardiness has a new definition. Instead of asking if it will stand our severe winters, the question now is whether it will withstand drouth. Plants which have endured twenty-five degrees below zero, have succumbed to the late drouth. There is life in neither root nor branch. This sad result of aridity is more perceptible in shrubs than in herbaceous



Natural size.

VIOLA BLANDA.
SWEET WHITE VIOLET.

ous plants. Yet of all those that have perished a little irrigation would have saved them.

Three years ago during a severe drouth, the parson lost seven hydrangeas while absent from home. The last season he was on hand and irrigated his new purchases; the result was that the young hydrangeas not only lived but flowered delightfully.

A plant that is ironclad in this respect is the Rudbeckia. One which was received by mail last spring, shot up four feet in height and was full of flowers, intensely yellow and very double. This plant is a great acquisition to our herbaceous species. One of its valuable properties is that of the great substance of its flowers. As a cut flower none surpasses it.

The auratum lily required water. Moles were very pestiferous among the plants, and they are especially fond of tulip bulbs. To circumvent these creatures a circles of holes was bored around the plants with an iron rod and soapsuds poured into them. This served two ends. It saved the lilies from the moles and gave luxuriant bloom.

The Columbian raspberry is a curiosity, unlike any other

raspberry. It bore several berries, nor was it watered. Maybe if all my raspberries had been Columbians, there would have been twenty times as much fruit as there was. The berries were astonishingly large and of most excellent flavor.

A Rathbun blackberry, which, while it did not bear, was diligent in making a luxuriant growth and it promises berries next



$\frac{2}{3}$ natural size.

VIOLA SAGITTATA

"blackberry time." So far as I am able to determine, the winter has not damaged the plant in the least.

The Pearl gooseberry is also a success, having grown lustily without a drop of water for weeks and weeks. One thing, however, must not be omitted, namely, this success is not reached without labor. The "garden eastward in Eden" re-



$\frac{2}{3}$ natural size.

VIOLA PEDATA.

quired care and cultivation, so the parson is careful in cultivation; manuring, and hoeing and mulching. A plant delights in being fondled and petted.

If burdened with money there would be no waiting for the natural increase of one plant, but enough would be purchased at once to make a sufficiency for family use. The raspberry named above is the one I would have in preference to all others.

Knowlton, Iowa.

THE PARSON.



ROCHESTER, N. Y., APRIL, 1898.

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CHARLES W. SEELYE, Editor.
ELIAS A. LONG, Associate,
(formerly conductor of *Popular Gardening*).

Publishers are invited to use any articles contained in this number, if proper credit is given.

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Village Improvement Associations.

One of our Michigan correspondents writes "We are trying to get up a village improvement association here. Hope you may say something in your MAGAZINE on that subject."

This is a subject upon which directly considerable has appeared, from time to time, in our publication, and indirectly the whole subject matter of our pages appertains to it. The root of the whole matter is the desire to make the home attractive and pleasant, both inside and out. When one has this desire the means of making the garden and the house surroundings beautiful will quickly be found. A smooth grass plat, some flowering shrubs, a few trees, a well-kept garden of flowers and vegetables, these will show the owner's taste. Trees will be planted on the street for their shade and appearance. A few persons of decided garden taste in any community, who show by their continued efforts their desire for the beauty of trees and plants, will influence many others and help to develop in them similar tastes and desires. When the garden taste of the greater part of the community is sufficiently advanced, then there will be a desire to go beyond each one's own premises and to look after the school grounds, the church yards, the cemetery, the grounds about public buildings, the care of the streets, the sanitation of the village, and everything that belongs to the welfare of the community. But, like charity, such work begins at home. Let every man sweep before his own door. We can imagine how the taste for village improvement might be fostered by a few advanced men and women who would meet together once a month, and invite all to come and talk over the sub-

ject, read some of the best things that have been written about it, propose some simple thing to accomplish at first and get as many as possible to work for its success. Afterwards something more would be undertaken. When the fine weather comes there can be a few garden parties or one or two picnics at which something shall be said or done to keep prominent the main idea. And by all means interest the children as well as the older people. Now, in regard to the children, there is one improvement that is demanded, not only in cities but in villages, and that is a play-ground purposely set apart and maintained for them, and adapted to all their wants in games of every kind. We do not refer to a park, desirable as that may be, though the play-ground may be an annex of the park. But a play-ground can be maintained without a park and should be considered a necessity, when a park, may only be desirable, and, for the time at least, unattainable.

* *

Bulletins From the Stations.

An excellent bulletin, No. 40, on Celery Culture, by Mr. W. M. Munson, is issued by the Maine Agricultural Experiment Station, Orono, Maine.

Those who are interested in road improvements should procure, if possible, Bulletin 46, by Charles H. Peetee, of the New Hampshire College Agricultural Experiment Station, at Durham, N. H., relating an "Experiment with a Steam Drill" and giving "Methods of Road Maintenance," beautifully illustrated with half-tone engravings.

The same station issues Bulletin 47, "Strawberries in New Hampshire, Test of Varieties; Notes from Growers; Cultural Notes," by F. Wm. Rane. This is a very interesting report and finely illustrated. The following note should be regarded: "Mulching through the winter meets with much favor, and in connection with clean culture and irrigation has made a decided change in the problem of strawberry raising. It has paid as well as irrigation. A plat left unmulched last winter has not yielded over half the fruit of mulched areas. Although the plants lived, the line of mulch was distinguishable at a distance all through the season,—foliage was weak, pale, and scant; leaf and berry stalks short and weak; consequently but little fruit."

The mulch employed consisted of different materials, according as they could best be had; straw, marsh hay, pine needles, pine boughs, coarse manure, etc.

The New York Agricultural Experiment Station at Geneva, N. Y., has issued Bulletin 125, Forcing Tomatoes, and Bulletin 130, A New Disease of Sweet Corn; also popular editions of these bulletins, both by F. H. Hall; and either of them can be had on application.

Insect Life.

Professor John Henry Comstock, the well-known entomologist connected with Cornell University and the Leland Stanford Jr. University, has performed a service for the children of this country that should entitle him to the gratitude of the public. He has prepared a text book on entomology, which treats the subject in a manner so simple and attractive that it must command the attention of teachers, and thousands outside of the schools who, by its aid, can pursue the study without further assistance. The title of the book is "Insect Life." By means of this volume any intelligent person can give himself a scientific training in the elements of entomology that will be of practical utility, especially to all farmers, gardeners, florists and amateur plant growers.

There is certainly something deficient in the instruction of children when they are carried through their course of studies, at an average age of fifteen or sixteen years, without learning anything of the nature, relations, habits and uses of plants and trees and birds and insects, the objects which are before them every day, and which in various ways effect them most materially. Our best educators have lacked a proper perception of the importance of these subjects; our teachers have been uninstructed and uninterested in them, and a dense ignorance of them is generally prevalent. No person can properly lay claim today to a fair education who has not been trained in the elements of one, at least, of the biological sciences. If this postulate is true, how shall we class the rank and file of our public school teachers who are almost wholly uninformed scientifically on these subjects! It is time to begin anew, and to work on different lines. The well-informed teacher could not employ to better advantage a half hour daily than by giving instruction before the pupils collectively in relation to plants and animals; and in no other branch would there be more willing and attentive pupils. And this might be done without interfering with the pursuit of the three R's, and with actual benefit thereto. Even in the lowest grade, and the kindergarten, children can be thoroughly interested in these subjects. It is evident that the remedy for this weakness in our course of common school instruction must begin with the teachers; and superintendents of public instruction and school commissioners should take the proper course to educate the teachers in the elements of plant and animal life, in order that all the children in our schools may be trained in relation to these subjects. It cannot be said the subjects have not been well elucidated. The literature in relation to them is ample in every branch; and the volume now under notice, "Insect Life," is particularly felicitous in the use of simple language, copious illustrations, the narration of interesting facts, and at the same time a strict adherence to scientific accuracy. The publishers, D. Appleton & Co., of New York, may take a just pride in issuing so beautiful a volume.

Letter Box.

In this department we shall be pleased to answer any questions relating to Flowers, Vegetables and Plants, or to publish the experiences of our readers. EDITOR.

Gladiolus Bulbils.

What are the small things, that resemble beans, on the bottom of the gladiolus bulbs in the autumn? Should they be planted in the spring? J. C.
South Bend, Ind.

They are bulbils or bulblets, little bulbs which, if planted, will grow to a blooming size.

++

Heating a small Greenhouse.

Will you kindly tell me how I can best heat a small greenhouse, ten feet in length, five feet wide and eight feet high? Mrs. O. B. L.
Detroit, Mich.

An oil heater, with a dish of water kept on it to supply moisture to the air, will probably be an efficient and economical means of heating the place.

++

Cactus not Blooming.

Advise me through the Letter Box what to do with my cactus to make it bloom? How much water does it need? It has not blossomed in three years.
Oberlin, Ohio. Mrs. A. C. H.

Without knowing what this plant is, it is impossible to give any specific directions. As a rule the plants do not need much water, and in summer should be exposed to the air and sun.

++

Petunias in the House.—Insects.

1—I would like to have you tell me how to succeed with petunias in the house. The double blotched ones give no flowers, and the leaves turn gray and wither up. The double red one looks thrifty, but it withers a little every day; it has plenty of water. It is full of buds, but they do not come to maturity, but they die before half developed. I use manure water to fertilize.

2—Some of my plants are troubled with a white miller-like fly. How can I get rid of it?
Landgrove, Vt. Mrs. G. M. H.

1.—The double petunias are not free blooming plants in the window. But single petunias, as window plants, are very satisfactory and bloom abundantly.

2.—Try the insects with molasses or sugar water, poisoned with arsenic, set among the plants.

++

Cyclamen.—Begonia.

1—Can you give me a few points on growing cyclamen? How long will it take seed to come up from the time it is sown?

2—If I should get a bed of tuberous begonias what should I have for edging the bed?

3—Which of the tuberous rooted begonias are the most profuse bloomers,—the double or single flowered?
Mount Pleasant Mills, Pa. Mrs. M. R.

1.—Cyclamen seeds will germinate in ten to fourteen days.

2.—The bed would not need an edging, as the plants are all low-growing, but if an edging should be desired it could be made of sweet alyssum or mignonette, or lobelia or ageratum or Vernon begonia or some other low-growing plant.

3.—The single begonias bloom most freely.

++

Caprice Rose.—Camellia.

The rose Vick's Caprice that I received from you is a very fine bush now; I think it is four years this

spring since it was planted. It bloomed in June and again in September.

I have a camellia, seven years old, five feet high, thrifty, but which has never bloomed. Two years ago it was full of buds, but they all dropped off. I wish I could get the entire culture of the camellia.
Eureka, N. Y. Mrs. H. R.

The camellia is a plant which succeeds best in a greenhouse specially devoted to it. It is not well adapted to house culture as it requires a cool and moist atmosphere. If success is to be attained in the cultivation of this plant in the house, it must be by keeping it in an enclosed bay window—where the heat and moisture of the air can be regulated independently of the atmosphere of the house room.

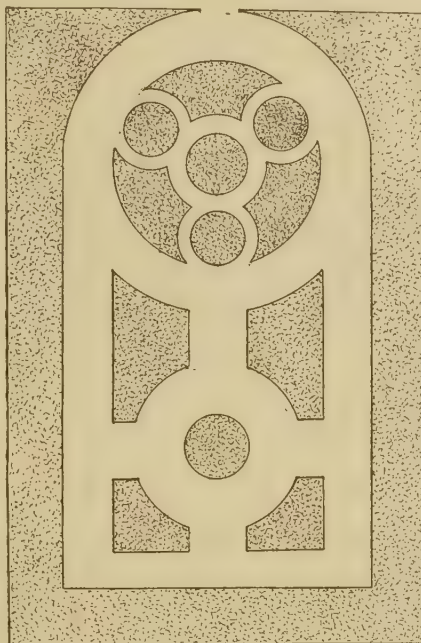
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Jadoo Fibre and Physalis.

1—What is Jadoo fibre and how is it made?

2—Is it worth while for one who has plenty of old manure to buy it?

3—I see the Chinese lantern plant, Physalis Franchetti, is said to be hardy in the open ground. Does this mean anything more than that it will self-sow like the sand or ground cherry? The European win-



A FORMAL FLOWER GARDEN.

Scale: 1-12 inch to the foot.

ter cherry, Physalis Alkekengi, has scarlet fruit and husks.

4—Is the P. Franchetti really different from this, or is it an old plant under a new name? E. S. G.
Canaseraga, N. Y.

1.—The public is not informed in regard to the composition of Jadoo fibre.

2.—Probably not, as a rule, but it may be desirable for plants of some kinds; for instance, it has been shown that ericaceous plants that do not thrive on limestone soil will do well on the fibre.

3.—Physalis will not live out through our winters.

4.—It is a new species and handsomer than P. Alkekengi.

++

Achania.—Begonia.

I rely on the MAGAZINE for information on many floral points, and generally find in its pages just what I want. I am in trouble about my Achania malva-viscus. It is a most satisfactory shrubby plant, in bloom all the year usually; has been reotted until it is in a ten-inch pot containing leaf mold, sand and garden soil; was nearly six feet high in the fall and I cut it back two feet or more. It had a few flowers

when it started again, but soon the leaves began to dry at the points, when about half grown, and fall off. I do not think it is kept too wet.

Begonia argentea guttata behaves the same way,—or rather worse, in that it sheds stems as well as leaves, and it ought to be at its best now. I let them both rest in December and January, and thought they ought to do better, but the new leaves dry at the ends and drop when about half grown. They are in south windows, with long porch in front and only get direct sunshine when the sun gets low. What is wrong?
Hagerstown, Md. Mrs. B. P. R.

The achania received a great check when it was cut back, and it ought then to have been placed in a moist atmosphere and to have received more than the usual amount of heat to encourage a new growth. In its enfeebled state its roots have not fully responded to the wants of the plant, and the dry house air has taken the moisture from the leaves faster than the roots have supplied it, and thus kept it in a low condition. It probably will not change very much until steady warm weather comes and the house fires are let out.

Too warm and dry air has also affected the begonia.

++

A Formal Flower Garden.

I send you a copy of a plot made for a lady friend last spring. The two large circular beds are four feet in diameter, main walks three feet wide, border surrounding the whole three feet wide. This was drawn for a flower garden 24x39 feet, surrounded by a fence of netted wire which serves as a trellis for sweet peas; inside the peas a row of roses around the plot. Beds planted with low-growing flower and foliage plants in front and tall ones behind; two large circles filled with cannas; three small circles geraniums. If you choose to accept and use this, any suggestions from you as to proper plants for this plot would be appreciated by the lady for whom drawn.

Hadensville, Ky.

C. H.

Geometrical gardens, though not now much in favor, are suitable in some places, and presuming such to be the case in this instance, it may be said that the arrange-

Spring is the Time

When Impurities in the Blood
Should be Expelled.

America's Greatest Medicine is the
Best Spring Medicine.

In winter months the perspiration, so profuse in summer, almost ceases. This throws back into the system the impurities that should have been expelled through the pores of the skin. Boils, pimples, humors and eruptions then appear or some more serious disease may take its start. Hood's Sarsaparilla is the remedy for impure blood in all its forms, as proved by its marvelous cures of blood diseases. It is therefore the medicine for you to take in the spring. It expels all humors, and puts the whole system in good condition for warmer weather.

Hood's Sarsaparilla

Is America's Greatest Medicine. Sold by all druggists. \$1; six for \$5. Get only Hood's.

HOOD'S PILLS are the only pills to take with Hood's Sarsaparilla.

ment as shown in the illustration, is an economical and pleasing disposition of the space. Using the two larger circular beds for cannas is very proper, as they are the most prominent positions, and no other plant can give such positive color tone to the garden as the cannas, and it lasts the summer through. If the circular bed in the middle of the large circle is filled with cannas of a yellow shade then the three smaller circular beds might be filled with begonia Vernon and begonia semperflorens and Soupert roses, while the beds between them would look well with low plants displaying much green and white or if bordered with white and green leaves plants like Madame Salleroi geranium or whitish leaved plants like Cineraria maritima or santolina, and the center filled with achyranthes and heliotrope or with blue flowered ageratum or lobelia. The other round bed filled with geraniums of a pink shade. Crimson flowered cannas may be surrounded with beds showing principally white and shades of yellow.

Roses.—Clematis.

1.—Will you please name what you consider as the six best white roses, three hybrid perpetuals and three monthlies. Also the six best pink roses of the two classes; and the six best very dark crimson or scarlet of the two classes.

2.—Are the new Rambler roses, the Clothilde Soupert class, and the climbing Souvenir de Wooton hardy at Rochester?

3.—Is the President Carnot a desirable rose? Do you think it better than the old Caroline de Sansal, which has grown and bloomed in my yard since 1857?

4.—What pure white clematis do you think the best of the large-flowering varieties? J. F. S.
Lewis Center, Ohio.

1.—The catalogue descriptions of the varieties of roses are intended to be accurate, and from them one must make choice or wait until the opportunity may come to see the flowers themselves. In either case it is doubtful if any two persons would make exactly the same choice, as individual preferences would be different.

2.—The Crimson Rambler has been very thoroughly tested in this locality and found quite hardy. The white and yellow varieties since planting out have not had as severe tests, but have not suffered from the weather which they have so far experienced. The Clothilde Soupert and pink Soupert should have a little protection. Climbing Souvenir de Wooton appears to be as hardy as other hybrid tea varieties.

3.—President Carnot is a very beautiful and desirable rose. It is different from Caroline de Sansal, which, however, is a most satisfactory variety.

4.—Henryi is probably the most reliable of the large flowered white varieties of clematis.

Pruning Grape Vines.

Have read with interest in the MAGAZINE of February, your directions in regard to pruning grape vines. Will you please continue in some future number directions for treating the vines until the fruit is ripe. Last year a gardener near me, who has quite an assortment of vines, cut back during the summer

a great quantity of the new growth, sometimes two or three feet in length, to keep them looking nice and even on the trellis. They ripened late (some not at all); do you think the severe cutting back prevented them from getting ripe? Another cut off leaves so the sun would strike the fruit. Do you think it an advantage to do so much cutting back? S.

Troy, N. Y.

A "gardener" especially should know better than to cut back in summer the new growth of grape vines, or to cut off the leaves. The process of ripening the fruit takes place through the action of the leaves, and to the extent the vine is deprived of these so will the process of ripening be delayed, or altogether prevented. Some fancy grape cultivators make it a practice to pinch or stop the new growth after the second leaf beyond the last fruit cluster has formed. The result is that the bud in the axil of the last leaf pushes and a new growth is made; then this new growth is again stopped by pinching after two leaves have been formed, and if growth again starts the operation is repeated. It is claimed that by thus pinching the shoot and stopping growth finer fruit is produced; and that the pinching of the new shoot does not check the plant as does the pruning away a great amount of foliage, after it is formed. Undoubtedly this last claim is true and it is the proper way to regulate the amount of foliage, if it requires regulating. Vineyardists generally do nothing of the kind. They regulate as carefully as possible, guided by experience and observation, the amount of wood or new growth for each vine, according to its capacities, by the regular annual winter pruning. But further than this the growth of the vine is left to itself without interference in any way, unless to tie it up. For some styles of pruning no tying even is required.

* * *

SULPHATE OF IRON FOR VINE DISEASES.

According to French investigations the use is recommended of sulphate of iron as a winter treatment for the prevention of black rot, oidium, mildew, anthracnose, pourridie, etc., of the grape. The method of application recommended is to bathe or sprinkle the vines with a 10 per cent solution of sulphate of iron and place the powdered sulphate about the vines at the rate of 400 to 800 pounds per acre, the quantity depending on the porosity of the soil.

The use of sulphate of iron solution, as mentioned above, has been made in this country for some years past for the prevention of anthracnose. The best method of making the application is with a brush, after the pruning has been done.

* * *

SOME COMMON CAUSES OF SEED FAILURE.

THE writer long ago learned that where there is failure in seed germination it is very easy to blame every other cause than the right one. He recalls a particular case in his own early experience, and which has proven to be a valuable lesson to him ever since. The case was this. He had sown a quarter-acre garden plat to onion seed under conditions that, he thought, were very favorable to a great crop. The soil was mellow and rich, the time of sowing early, the weather seemingly all right, and yet

the seed did not come up well, in fact, the crop was a failure and the land later was put to other use.

Of course, when all the conditions were so favorable to a good catch, and then the seeds didn't come up, the fault must certainly be in the seeds. That was the conclusion reached, but which the writer was soon forced to abandon. Walking to the further end of the rows one day, he was surprised to find that onion plants had come up thickly in a certain spot. Then he recalled that some seed had been spilled there at the time of sowing. It now was in evidence that here where the seed had been spilled over the surface and had merely been *tramped by the feet*, it had come up thickly, while that in the drills had failed. Here was a vivid lesson on the comparative danger of deep sowing, and the seedsman who had been severely blamed for selling bad seed was now completely exonerated.

How shall this experience be explained? Let us take a glance at the engraving figure 1, designed to represent a cross-section of loose garden soil with several seeds lying on the surface. Over the cross-section is the word "dryness" which refers to sunshine and winds as common features in seed sowing. Beneath is the word "moisture," referring to the dampness contained in the soil as a necessary element in seed germination.

The process of germination is a very simple one ordinarily. The seed deposited in the earth absorbs moisture and swells; the seed husk at the same time softens and permits of the young plantlets' ready growth in case the necessary conditions of heat and air are present. If the seed



A Bicycle Boot

travel stained, mud splattered, gray with dust and shabby looking, can be made to look as good as new with a little

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Leather Dressing

Polishes leather and softens it. Gives it the lustre it had when it left the makers' hands. Good for any kind of leather, any kind of shoes. Sold by all dealers. Made by the makers of the famous Vici Kid.

An illustrated book of instruction—"How to buy and care for your Shoes," mailed free.

ROBERT H. FOERDERER, Philadelphia.

is in soil that is wet and the season is too cold to cause germination, it will rot; if the seed should continue to lie on the surface on dry particles of earth as in figure 1, it lacks the necessary moisture and will not grow.

Advancing a step, we come to figure 2, which represents the loose soil of figure 1 compressed by tramping with the feet

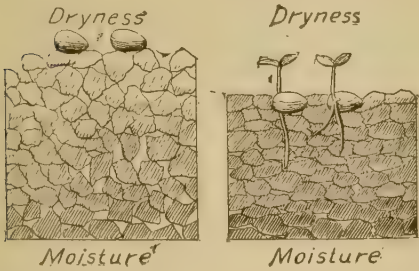


Fig. 1.—Seeds on the surface of loose soil particles. Magnified.

Fig. 2.—The soil of figure 1 compacted.

or otherwise, and the seeds embedded in it. This is assumed to be the condition in which the onion seed referred to, readily germinated, while that which was deeply covered in drills failed to come up. But let us not from this conclude that surface sowing is to be advocated generally. It answers very well when suitable conditions can be maintained, but this does not usually happen. Grass seed is sown without covering, but usually so early in the season that there is no lack of moisture, while the drying influences from above are not apt to be unfavorable. The writer sows the finest kinds of flower seeds without soil covering. This he does in a pot and provides moisture from below by setting the pot in a basin of water occasionally. Besides this he lays a pane of glass on the pot to conserve the moisture over the seeds. In this way success may be had with the finest kind of seeds like those of calceolaria, cineraria and mimulus, where to attempt to cover them, however slightly, would be quite sure to result in failure. Referring again to figure 2, it is seen that several things occurred to the soil of figure 1 as a result of tramping or rolling. First, the air spaces are, in large measure, closed

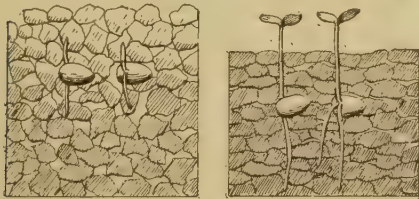


Fig. 3.—Seeds sown right for depth, but the soil too loose.

Fig. 4.—Right depth sowing, with soil properly compacted.

up, thus preventing the free access of drying influences in the top layer of soil. Second, the compression being towards the stores of moisture, capillary attraction is so increased that the moisture more readily comes in contact with the seed, and other conditions not being unfavorable, growth takes place.

But with ordinary flower and vegetable seeds it is found that to cover them somewhat with soil is the better course. Then comes the question, how much shall they be covered? Perhaps no better rule can be laid down than that of covering to twice the diameter of the seed. Such a cover is shown in figures 3 and 4, the former in the case of loose soil, the latter the same soil compressed by tramping or rolling. By these illustrations we may learn the importance of soil compression where the depth of covering is approximately correct. It is a lesson of the utmost importance to successful gardening. The reason why the seeds of figure 3 are bound to suffer is, that they are not properly brought in contact with moisture while they are unduly subjected to influences of drouth from above. Thus the seed shells cannot properly soften and the plantlets must make feeble progress, resulting in weak plants, if they grow at all. Many precious seeds are destroyed by such loose covering.

Now look at figure 4, being the same as figure 3, but with the soil properly compressed. Here the drying influences from above are lessened by the greatly reduced

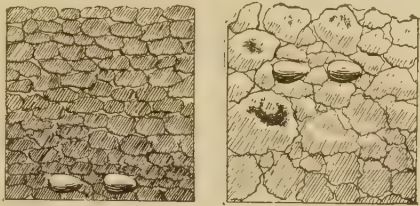


Fig. 5.—Covered too deeply, with danger to seed.

Fig. 6.—Sown in rough, dry soil. Not likely to grow.

size of the soil interstices, while the seed has damp soil packed closely against it ensuring the softening of the seed cover, and with it successful growth, other conditions being favorable.

Figure 5 shows the fault of deep covering, a source of incalculable loss to gardeners, and especially the inexperienced. Here the soil is shown to be properly firmed, but the seeds are so far below the warmth and air, that if the season happens to be cold and wet they are liable to rot, whereas had they been kept near the surface, as in figures 2 and 4, there should be successful growth.

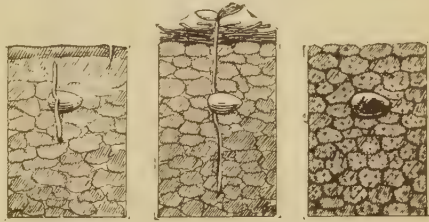


Fig. 7.—A crusted soil, may cause loss. Fig. 8.—The advantages of mulching. Fig. 9.—Rotting in wet soil.

Figure 6 shows the sowing of seeds in rough, coarse soil. If there is any good result from such an operation it will be by the merest accident of free showers to slacken the lumps, and of congenial warmth to cause growth in spite of unfavorable conditions.

Figure 7 represents the common condition of a soil crusted over as a result of rain, or water from the water pot, beating down the earth, and the sunshine then heating it. Many small seeds are lost in this way because the young plants become enfeebled by lack of air or other causes, and then have not the strength to push through the crust, or if they do, the chances may be that the plants will be weak and the crop poor. In the case, however, of ordinary vegetable seeds and the coarser flower seeds, little fear of loss need be entertained on this account.

Figure 8 shows an admirable plan for preventing the crusting over of seed rows



Three Rambler Roses

White Yellow Crimson

Will make a magnificent hedge, beautiful shade for the piazza, or a charming bed. Constant bloomer; perfectly hardy. One plant will produce thousands of flowers.

These Three Roses delivered for only 40 c.

James Vicks Sons,
Rochester, N. Y.

in the case of choice seeds. This consists merely of mulching the soil lightly with fine hay or lawn clippings. The result gained is that the water cannot beat down the soil and the sun cannot bake the surface, besides which the moisture is conserved to the seed without cutting off the air, a combination of advantages that is in every way favorable. This plan of light mulching should be generally adopted with flower seeds.

Figure 9 illustrates loss from sowing in wet, undrained land. Here it is seen that although the seed is sown by our rule of twice the depth of its diameter, and the seed was properly compressed, yet the interstices are filled with water, the air is cut off from above and the seed must quickly rot if these conditions continue.

To sum up the results of our lesson, let this general rule be laid down. Have good soil, not wet, but in a friable condition, cover to twice the seed's diameter, compress the soil moderately, try treading once over the row with the feet or otherwise, and where sowing is done on a small scale, mulch lightly over the row. The universal adoption of this rule would prevent the loss of an immense quantity of seeds annually. *

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PAMPAS GRASS RE-NAMED.—The genus *Gynierum* has heretofore contained six species. A late issue of the *Garden* states that Dr. Staff, of the Kew herbarium has removed five of the species, leaving only one, *G. saccharoides*, to represent the old genus. The others are placed under the genus *cortaderia*, and the well known pampas grass is henceforth to be known as *Cortaderia argentea*.

.

BLUE FLOWERED HYDRANGEAS.—The application to the soil, when *Hydrangea Hortensia* is growing, of either alum, aluminum sulphite or iron sulphate have been found to induce the formation of blue flowers.

Farm, Field and Fireside.

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Three Cannas, five named varieties, 45c.

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Dahlias, named varieties, each 20 cents ;

Three for 50 cents ; per dozen, \$1.75.

JAMES VICKS SONS,
ROCHESTER, N. Y.



Quick with lawn sowing.

Plant trees as firmly as a post.

Let there be no skimpy garden this year.

To escape radish maggot sow in a fresh spot.

With half the buds nipped out, the bloom will be doubly fine.

A shrub border that has become crowded should be thinned without sparing.

You cannot profitably avoid spraying; so get around the apparatus in good time.

One still meets people who have never grown the Shirley poppies. This should not be.

It certainly is a benefit to scrape trees, to rid them of insect houses—the rough outer bark.

When planting the place, bear in mind that as a regular cropper, no tree excels the Bartlett pear.

An arbor day thought. He who plants a tree makes a lasting contribution to the beauty of home, school and land.

Geraniums slipped in April and kept disbudded and brought along in pots until fall, will give a good account of themselves for window flowers about next Christmas time.—Nolan.

Is your taste towards Japanese? Then the delightful *Akebia quinata* will, as a veranda climber, especially suit you. It is neat, picturesque, robust, and an interesting and handsome vine every way.

The moneyvine, old-fashioned plant that it is, never fails to afford delight when used as a drooper. If kept in a suspended pot or vase in moist soil, it will produce chains of foliage three feet in length. But planted in the garden it may become a weed.

The strawberry is like most of the vegetables in this respect: you cannot make the soil for it too rich or too deep. It is indeed a pleasure to raise this delicious and easily grown fruit, where the soil is rich and the culture is clean.

Pine for Shelter Belts. In some places the Norway spruce is planted so excessively that one might judge that there are no other good evergreen trees known. The white and other pines are perfectly suited for use as wind breaks. Plant in a double row about a dozen feet apart with the trees four feet apart in the row, thinning to twice this distance a few years later.—P. A. C.

The Vallota or Scarborough Lily. Here is a flower of the highest order of value, that we fear the younger generation of plant growers is quite too much neglecting. The plant is bulbous and produces splendid spikes of large brilliant scarlet blossoms in August. It belongs to the amaryllis order and is one of the finest of its class. It is of the easiest culture, on which account it is especially deserving of mention to the inexperienced. If not in your list let it be tried by all means.

Hurrying the Bloom. Those Flower growers who sometimes deplore the stubbornness of plants about blooming, what do they think of a

Cincinnati florist's way of forcing things? It is told by the *Florist's Exchange*. The florist had an order for a thousand valley lily spikes for a certain day. But the bloom came on too slowly, so he resorted to putting the boxes in which the plants were growing, over the tops of coal oil stoves; stayed up nights to spray them with warm water—filled the order and got his money. It was a case of "money makes the flowers bloom."

The Weed Battle. It pays to begin the weed fight before the planting is done. Cultivation is the easier then because it is not restricted by lines of plants, hence the soil can readily be put into the best possible tilth. The advantage of this is two-fold; first, many young weeds will be directly killed, and second, every later move, of cultivator and hoe, will be more effective in soil that was well fined before planting. There is the added gain that the young crop will progress better in the finer soil, to the making of a better stand in the race against weeds and other ills.

Improving Taste. It is a favorable sign that the taste for such noble flowers as the pæony, the crown imperial, the asters, the hollyhocks, and others of their classes is again rapidly coming to the front. Some years ago there was such a rush for the geraniums, coleus and other tender bedding plants to be used in the flower garden, that it began to look as if the grand old plants of more quiet bearing, might be crowded aside. Happily such was not to be the case. The bright rivals of the greenhouses found wide popularity—much of it deserved—but at last they have found their proper place even in the best of gardens, namely, they are factors, but not the whole thing, in floral adornment. There is a degree of monotony and lack of expression in a bed of geraniums or coleus that quite unfits them for being a really satisfying element for large use in the garden.

Melons in the North. There is often disappointment in the raising of melons, because frosts appear before the crop has amounted to much. One of the best ways to stave off the frost season, in effect, is to lengthen the season by that much at the start. It is easily done where there is a hotbed. All that is necessary, is to plant the seeds on inverted pieces of sods, that are about half a foot square and two or more inches thick. Have the sods all of one size and place them snugly together. To mark their centers set a bit of twig in each one. After this cover over with an inch of light, rich soil, on which place five seeds to each sod, covering therewith an additional inch of light earth. This should be done, according to location, about three weeks before planting out time. Then treat bed as you would any hotbed. In about four weeks transfer the sods with their plants carefully to the field and plant them. For some days before this the sash should be removed from the bed to inure the plants to full air. The same end can be reached by planting the seeds in five-inch flower pots instead of in sod. This treatment also answers for cucumbers.—S. J. Hilton, Macomb Co., Mich.

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SEED PODS.

April is not too early for the buds of the old pink daily rose. One great bush beside a tall brick chimney at my home is always wreathed with them in April.

Tender plants in the cellar are beginning to grow. Give them more air and all the light possible, but be careful about watering. Give just enough to keep them alive.

Now begins the season for re-potting, and I fear that the old soil from pots will be used to fill up garden beds. If no fresh soil or fertilizers is used with it, the flowers growing in them will not thrive, for this old soil is thoroughly exhausted and likely to contain the germs of disease. The best use we have ever found for it is to fill up uneven places in the sward.

This, too, is the time for sowing grass seed, so these filled spaces should each have a handful of seed sprinkled over them, raked in lightly, and then firmed with the foot or spade. All through spring, when we can work between showers, we are patching up the uneven or the bare places on our lawn in this way. If the old turf is dead, it must be removed or have some fresh soil scattered over it. We sprinkle these patches every few days if the clouds are not obliging.

If some one is planning for vases or baskets on the lawn and is tired of the nasturtiums, vincas, etc., so generally

used, let me suggest try geraniums; not a new idea, perhaps, but one that deserves to "obtain" much more generally. These geraniums grow luxuriantly and bloom generously in such places under the very hottest suns.

Roman hyacinths bloom too early in North Carolina—in February and March, sometimes even in warm Januaries. Of course, very cold nights and nipping frosts are apt to overtake them before the flowers have faded. We grew tired of covering them and did not want to give them space under glass, so had almost concluded to give up all except those forced in the house. The bulbs in exposed situations were finally dug up and planted under the chrysanthemum shelter described in the December number of this MAGAZINE. When the chrysanthemum pots are removed they get full sun and bloom nicely. We can have fine early bloom from our lily of the valley in the same place. The hyacinths are planted between the clumps of chrysanthemums; the lily of the valley between them. We shall need to redig and replant the whole arrangement pretty often, but think 'twill be worth the trouble. In summer we can shade the top sashes, leave out the end ones and have a cool nook for fuchsias, gloxinias, begonias, azaleas, etc., or, we can pack away the sashes until needed again in the fall.



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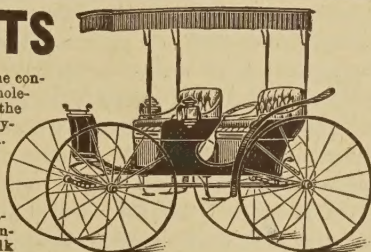
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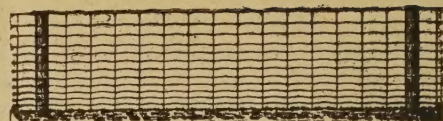
THE JUNIOR LEAGUE'S FLOWER SHOW.

THERE was great enthusiasm in the Junior League of First church when the leaders asked the children what they would like to do toward increasing the funds for building the new chapel. These wise leaders had learned by experience that the best thing to do with wideawake girls and boys is to keep them busy, so, when it was suggested that they plant flower seeds and cultivate little gardens for a flower exhibition in the latter days of summer, all hands went up in a unanimous vote, and, in the exuberance of his pent-up zeal, one jolly boy held up both hands and shouted "aye!" at the top of his voice. Order was immediately restored, after this dreadful breach of the peace, and all the details of the new enterprise were arranged to the satisfaction of all.

One snowy day in April, when it seemed as though spring was still a great way off, sixty girls and boys were each given several packets of early fall flower seeds which had been obtained from the seed house of James Vicks Sons, Rochester, N. Y. The order of preparation was as follows: The children were divided into three classes, according to age. Those from six to eight were known as juniors, others from nine to eleven were called the middle class, and the third, from twelve to fourteen, the seniors. Those in each class received three packets each of the same varieties of annual flower seeds, and were instructed to plant and cultivate them without any help and to bring the cut flowers or potted plants at the appointed time for the exhibit. The older children were given seeds of flowers which were rather difficult to raise, the middle class those of easier cultivation, and the little ones those hardy varieties which will grow almost without any care.

The summer passed quickly. Some of the gardens languished from neglect and because of poor soil, for they were all city gardens, and had to fight against great odds. Some families went into the country for summer vacations, taking the children with them and when they returned they found that the weeds had smothered the flowers. It was a great struggle with some of the girls and boys to raise any flowers at all, for, what with dogs and cats and worms and snails and wet and drought they could hardly grow at all.

The great day of days came at last. It was about the first of September, when autumn flowers are at their best. A large tent had been rented and placed on a conspicuous corner of the church lawn where it could be plainly seen from three directions. Notices had been published in pulpit and press. All the forenoon busy children came trudging along with burdens of beautiful flowers of their own raising. The entrance to the tent was



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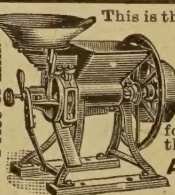
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